CATALOG № 5.

EXCELSIOR FENCE

THE EXCELSIOR FENCE WORKS

N.P.RY. AND WALNUT ST. SPOKANE WASH.

FARM & RAILROAD FENCE

FOR SALE BY

P. MORRISON

Grower and Dealer in

Hay and Grain

Excelsior Fence Works.

Gentlemen: Please book me for four miles of 5 wire Excelsior Fence. I have tried several different kinds of fence and the mile of fence you built for me last year is the only kind that has filled the bill. Yours truly,

(Signed) P. MORRISON,
Spokane, Wash.

TUCANNON STOCK

RANCH

Rambouillet and Delaine Sheep

R. A. JACKSON

Excelsior Fence Works.

Gentlemen: I have tried your Clamps and Stays both in making new fence and in repairing other fences of different make, and am well pleased with the results. I have over fifty miles of fence on my different ranches, have tried a great many kinds, and I say without any hesitation that your Excelsior Clamps make the best fastenings for stays on ANY kind of wire fence I have ever seen. Very truly yours,

(Signed) R. A. JACKSON,
Dayton, Wash.

A SERVICEABLE FARM FENCE MUST HAVE

First	Second	Third
Good strong line wires	*Stays that do not bend up*	*Proper fastening of stays*

These are the main essentials of a good farm fence. Unless the fence has **ALL** of these three **ABSOLUTELY NECESSARY** qualifications, it simply **CANNOT** give the service and satisfaction you expect.

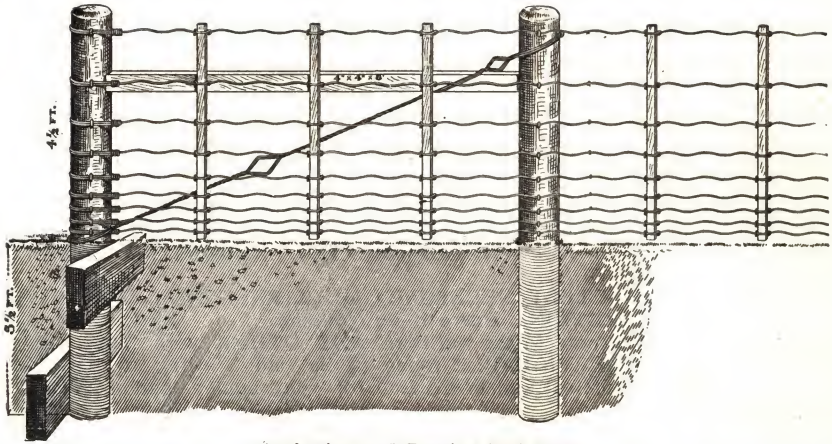
In selecting a fence, you should weigh these facts **CAREFULLY.** It is VITALLY IMPORTANT to you. You do not throw money away carelessly; why, then, should you waste it on a fence which HAS NOT ALL THE ABSOLUTELY NECESSARY ESSENTIALS to make it entirely satisfactory?

ALL OF THESE ABSOLUTELY NECESSARY QUALIFICATIONS ARE FOUND IN EXCELSIOR FENCE TO PERFECTION. Prove it for yourself.

Excelsior Fencing weighs more to the rod than ANY OTHER wire fence, and it is the MOST SUBSTANTIAL and SERVICEABLE fence to be had. Owing to its practical construction, it is the most economical and best value for your money, and COSTS LESS than many other kinds of wire fence.

On pages 10, 11, 12, 13, 14, 15, 16, 19, 20, 21, 22 we illustrate the styles in which Excelsior Fence is mostly used. If you do not see the exact style of fence you want, ask for it, as our fencing can be erected in ANY STYLE to suit your own requirements.

Excelsior Stays and Clamps are now being used on wire fencing of ALL kinds, which is acknowledgement and proof of the advantage and necessity of Stays which do not bend or get out of shape, and a fastening which is sure and positive.



Anchoring and Bracing End Post.

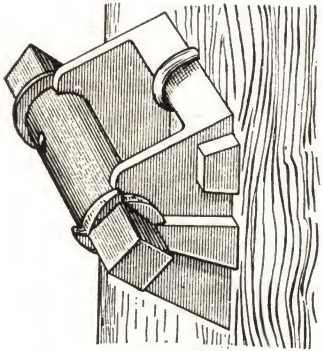
The End or Brace posts are the FOUNDATION of a wire fence. A fence, like anything else built upon a poor, weak foundation **cannot** last or give good service. It is false economy to put in small, weak posts for End, Corner or Gate posts. Get the best. They are far the cheapest in the end.

DIRECTIONS FOR ERECTING

Setting, Anchoring and Bracing Posts: Obtain large and stout end posts as described below, spike on two pieces of plank 20 inches long and 2 inches thick (see illustration) and set in the ground NOT LESS than 3½ feet, leaving 4½ feet above ground. Large flat rock may be substituted and placed in the same position of the two pieces of plank. After the earth is WELL TAMPED around it, set another post 8 feet away WITH ITS OUTER FACE IN A LINE WITH THE CENTER OF THE END POST. Bore small holes in the end post at the distances the wires of the fence are to be spaced, and between the two, about 6 inches from the top, and so as to clear the holes, fasten a piece of 4x4 inch timber or something as strong. Drive a staple lightly in the end post near the ground line, and one near the top of the second post so that two strands of No. 9 common galvanized wire will pass through easily. Pull up the slack in this binding wire brace, fasten the ends of the wires, and with a strong stick or hammer handle, twist the wires into a tight cable. Set all line posts one rod—16½ feet—apart for the best results and in a line with the second post, and mark the posts indicating the spacing of the lateral wires.

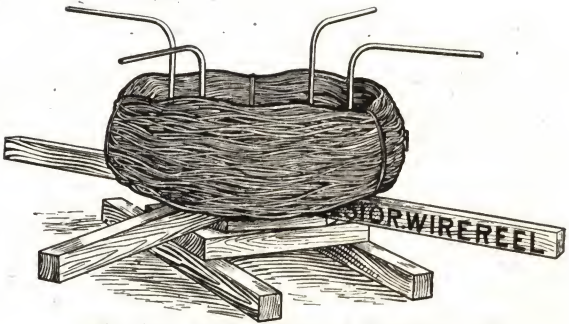
Running the Wires and Putting On the Stays: After all posts are set and well tamped, THE END, GATE AND CORNER POSTS IN PARTICULAR, place the wire reel at the post which has the holes bored in it, and run the wire to the next end post, wrap it around TWICE and fasten. While the wire is being unreeled a man can follow up and staple at the places on the post which indicate the spacing of the wires. Be sure to staple so that the wires can pass through easily. Pull up the wire at the other end and cut, leaving about 6 inches over. Pass this end of the wire through its proper hole in the post and reel up the slack on the ratchet until the wire is tight. After all the wires have been strung in this way, put on the stays, using a gauge to keep them spaced evenly. See page 5 for further particulars.

Anchor posts should be at least 8 feet long and not less than 8 inches in diameter.



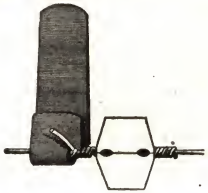
The Ratchet

Staple Puller



Wire Reel With Bundle of Excelsior Coiled Spring Wire

Wire Cutter



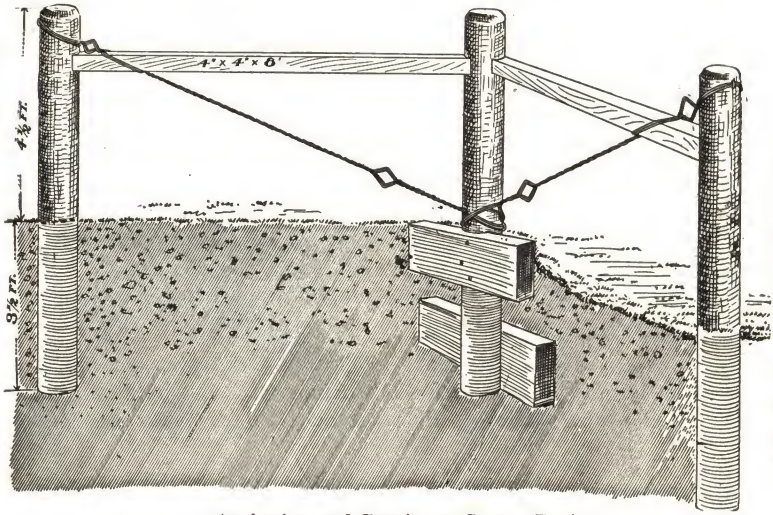
Used in connection with Wire Splicer

The Ratchet: In building fence, the ratchet allows each wire to be tightened or loosened as desired. At every quarter or half mile the fence is braced and a set of ratchets used—one ratchet to each wire of the fence. They are very desirable where common straight wire is used, but with Coiled Steel Spring Wire, ratchets are not so necessary as this wire is self-regulating, and after the fence is built you pay no further attention to the wires. They are of convenience, however, in getting all the wires the same tension before putting on the stays. The Block Tackle Stretcher pulls up the wire before it is attached to the ratchets.

Excelsior Wire Reel: Anyone who has attempted to uncoil a bundle of wire without a reel knows that the reel pays for its use many times over. The Excelsior Wire Reel has adjustable arms to receive any bundle of wire and is made especially for unreeling coiled spring wire. The iron parts are wrought iron; unbreakable.

Staple Puller, Etc.: Not only an indispensible fence tool, but a tool which will fill many other requirements. It is 9 tools in one: 2 wire cutters, 2 hammers, 2 nail pullers, 2 staple pullers, 1 single wire splicer, 1 double wire splicer, 1 light wrench, 2 pipe tongs and 1 wire stretcher.

Excelsior Splicer: The best tool for making a wire splice. When two wires are joined together it is used in connection with the above described tool. When a wire is wrapped around a post this little tool is also applied to fasten the end of the wire.

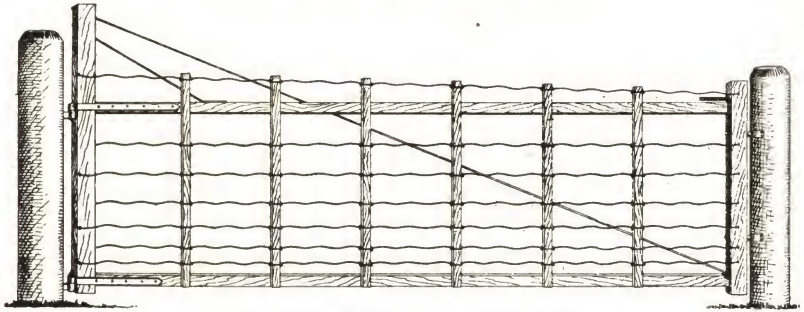


Anchoring and Bracing a Corner Post.

BE SURE to have the corner, gate and end posts, in particular, well tamped, anchored and braced BEFORE the wires are strung. Extra time spent in building the fence will more than repay you in results.

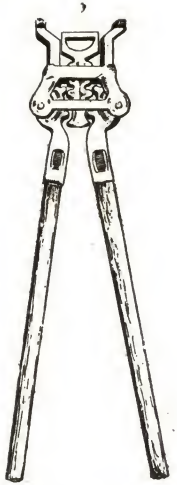
The fence is what you make it. It rests entirely with you whether you will get the service and satisfaction the fence is capable of giving. Remember, the brace posts are the foundation, and unless these are good and substantial, well anchored and braced, you cannot expect the best results.

EXCELSIOR FARM GATE



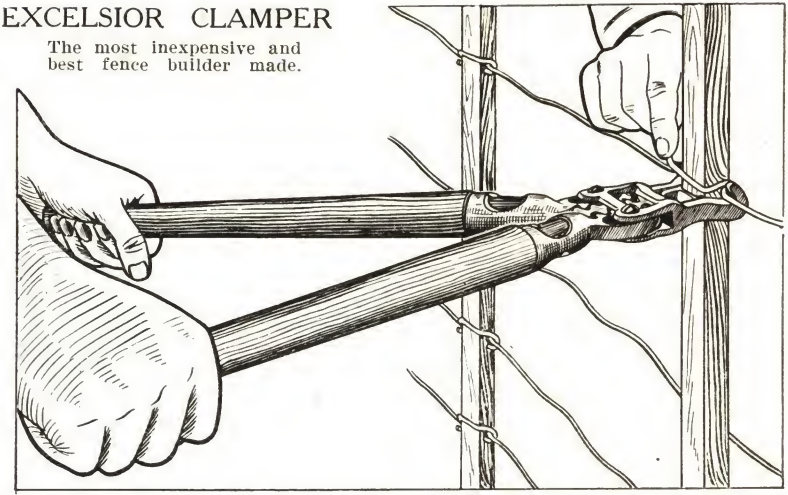
Lowest measurement, 4½ feet high.

In Excelsior Farm Gates we use the best seasoned fir, well painted, and build the gates to stand the usage which the farm gate is generally subject to. Excelsior Gates are equipped with an Adjustable Brace Rod, Central Hinges, which allow the gate to swing both ways, and a Double Automatic Latch which locks at top and bottom. The Double Latch makes the gate as fast at the swing end as at the hinge end, thus preventing hogs and other stock from pushing through. Made in 4, 10, 12, 14 and 16 ft. lengths. If gates for wider openings than 16 ft. are wanted, we are prepared to supply double gates.



EXCELSIOR CLAMPER

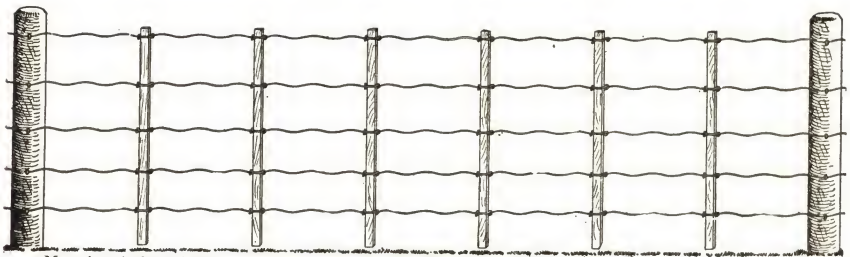
The most inexpensive and best fence builder made.



One end or hook of the clamp is placed over the wire after it has been drawn about half way around the stay, after which the other end or hook of the clamp can easily be attached. This operation "dents" or "squeezes" the wire into the stays and the clamp holds it in that position, thus embedding the stay in a vise grip from which it cannot possibly slip, slide or get away.

Farmers are beginning to realize that they can get better satisfaction and save money by building their own fence. It is only a matter of getting the proper kind of wire, the kind which is not effected by changes in temperature and getting it strong enough to resist anything it is required to, and getting the kind of stays and clamps which WILL HOLD these wires together and KEEP them together—that's Excelsior Fence.

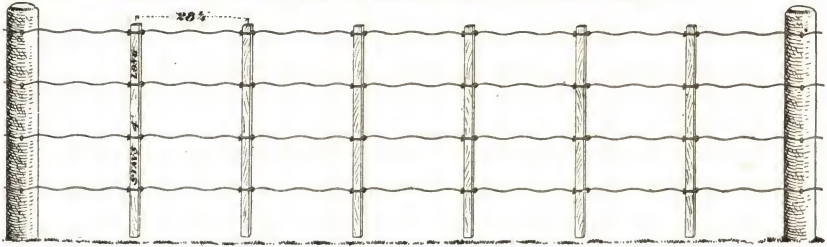
Every farmer may and should be his own fence builder. The Excelsior Clamper is the right tool at the right price and it builds the right kind of fence. Why pay for factory labor of weaving fence when you can build to better advantage and save money?



HORSE AND CATTLE FENCE.

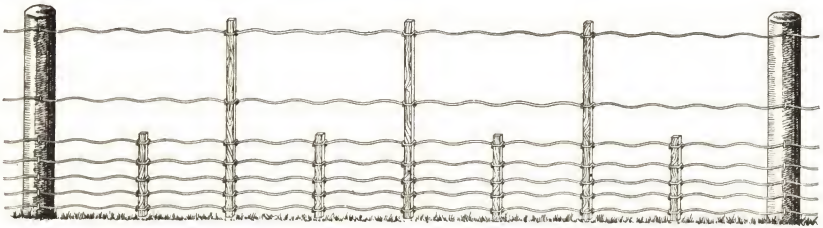
No. 1—4 ft. high ; 4 wires, spaced 10, 12, 12 and 12 inches apart ; 6 stays to the rod.

HORSE AND CATTLE FENCE.



No. 2—4 ft. high ; 5 wires, spaced 9, 9, 9, 9 and 10 inches apart ; 6 stays to the rod.

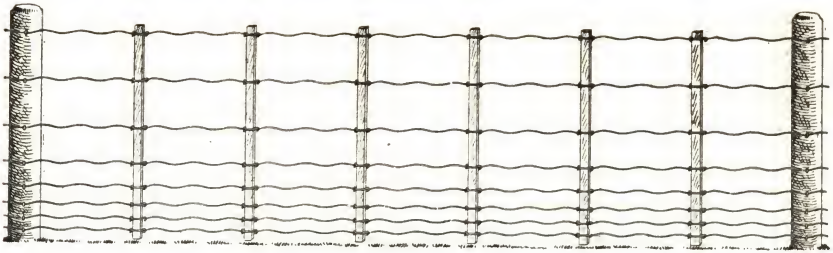
COMBINATION HOG AND STOCK FENCE.



No. 3—4 ft. high; 7 wires, spaced 4, 4¾, 5¼, 6½, 9 and 13 inches apart; 7 stays to the rod.

This style of fence is used where hogs and other stock are turned into a large field—for instance, a stubble field, or any large enclosure where the stock have plenty of room to hunt for food. If you have barb wire which you desire to work into the fence, it may be added or substituted for any of the smooth wires. By the Excelsior method of building fence, all the wires can be fastened to the stays, thus binding all the wires together, making a rigid fabric—a fence which cannot be bent up or out of shape.

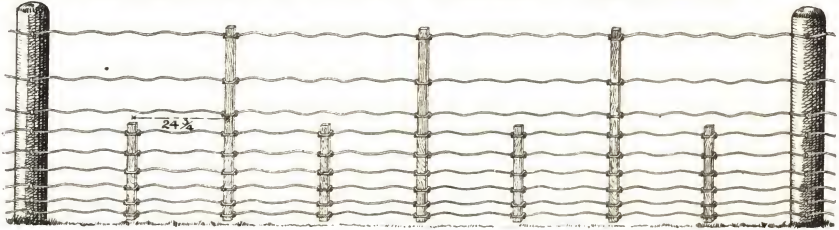
All the stays come in bundles of 25 and are 4 ft. long. The 2-ft. lengths or any length desired is easily obtained by sawing the stays to suit your own convenience or requirements. A bundle of stays (25) can be easily sawed at one time.



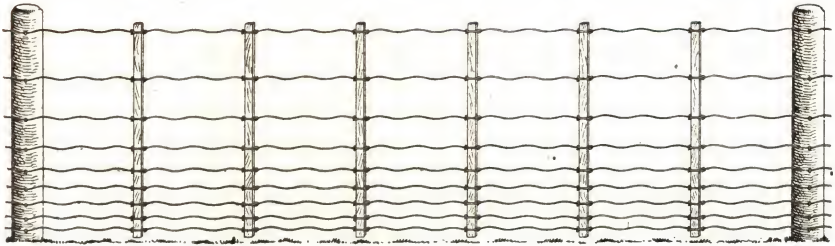
COMBINATION HOG AND STOCK FENCE.

No. 4—4 ft. high; 8 wires, spaced 3, 3, 4, 5, 7, 11 and 11 inches apart; 6 stays to the rod.

COMBINATION HOG AND STOCK FENCE.



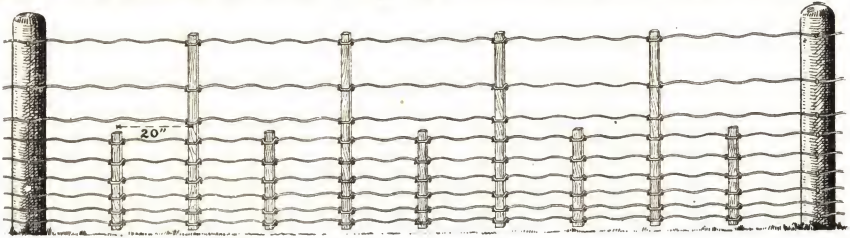
No. 5—4 ft. high; 9 wires, spaced 3, 3½, 4, 4½, 5, 5½, 7½ and 11 inches apart; 7 stays to the rod.



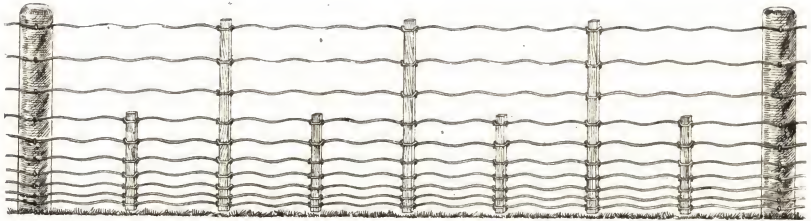
COMBINATION HOG AND STOCK FENCE.

No. 6—4 ft. high; 9 wires, spaced 3, 3½, 4, 4½, 5, 5½, 7½ and 11 inches apart; 6 stays to the rod.

COMBINATION HOG AND STOCK FENCE.



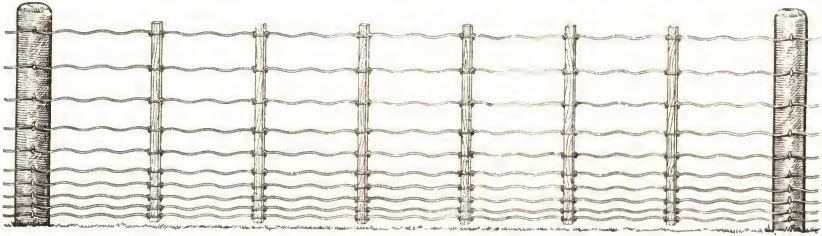
No. 7—4 ft. high; 9 wires, spaced 3, 3½, 4, 4½, 5, 5½, 7½ and 11 inches apart; 9 stays to the rod.



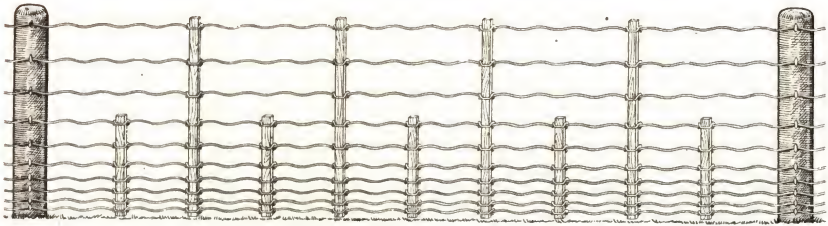
COMBINATION HOG AND STOCK FENCE.

No. 8—4 ft. high; 10 wires, spaced 2, 2½, 3, 3½, 4½, 5½, 7, 8 and 8½ inches apart; 7 stays to the rod.

COMBINATION HOG AND STOCK FENCE.



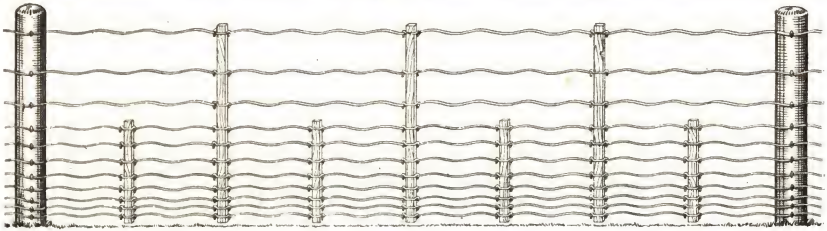
No. 9—4 ft. high; 10 wires, spaced 2, 2½. 3, 3½, 4½, 5½, 7, 8 and 8½ inches apart; 6 stays to the rod.



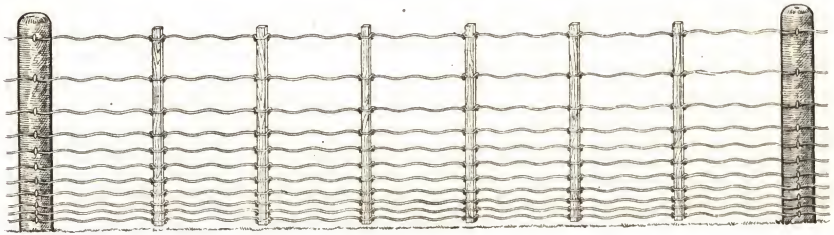
COMBINATION HOG AND STOCK FENCE.

No. 10—4 ft. high; 10 wires, spaced 2, 2½, 3, 3½, 4½, 5½, 7, 8 and 8½ inches apart; 9 stays to the rod.

COMBINATION HOG, STOCK AND POULTRY FENCE.



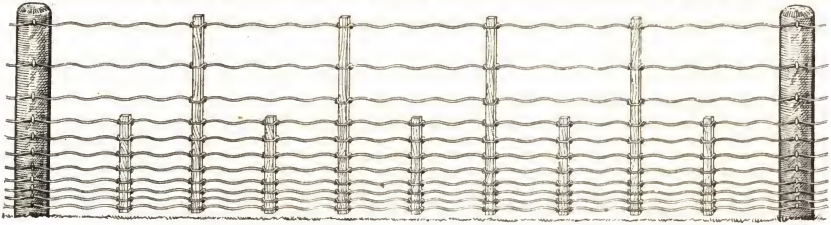
No. 11—4 ft. high: 11 wires, spaced 2, 2, 2½, 3, 3½, 4, 4, 5½, 8 and 10 inches apart; 7 stays to the rod.



COMBINATION HOG, STOCK AND POULTRY FENCE.

No. 12—4 ft. high; 11 wires, spaced 2, 2, 2½, 3, 3½, 4, 4, 5½, 8 and 10 inches apart; 6 stays to the rod.

COMBINATION HOG, STOCK AND POULTRY FENCE.



No. 13—4 ft. high; 11 wires, spaced 2, 2, 2½, 3, 3½, 4, 4, 5½, 8 and 10 inches apart; 9 stays to the rod.

Brace Wire: Don't overlook ordering brace wire with your fence. We recommend No. 9 gauge common galvanized wire. Figure 3 lbs. to each brace. See directions for bracing end, corner and gate posts, page 3.

Excelsior Fence Stays are made of high grade Pacific Coast Fir and are free of knots. They come in bundles of 25, are 4 ft. long, ⅞ inch thick and 1¾ inches wide.

The Excelsior Clamp can be used over and over again a thousand times, if necessary, and the fence can be taken down and erected in another place.

Adaptable to All Purposes: If you do not see the style of fence you want, write us. Excelsior Fence can be erected to suit YOUR requirements. Styles 1 and 2, page 10, are horse and cattle fences. These can be made into a closer fence, for hogs and all other stock at any future time by adding a few more wires which are very easily and quickly clamped to the stays with Excelsior Clamps. This is a great advantage, for, when you buy a fence, you never know what additional purpose you may want the fence to serve at a future time. You can add to Excelsior Fence as desired, and make it just as you want it, but with a factory made woven wire fence, this is **impossible** and you would have to buy an entirely new fence to meet the new conditions.

Barb Wire: Your barb wire can be utilized to the BEST ADVANTAGE in building our fencing, as the stays are fastened to the barb wire the same as to the smooth wire.

Perfect Fit: As Excelsior Fence is erected with stretching one wire at a time, it therefore fits the ground and can be stretched over the most hilly country, conforming to the slope and making a perfect fit. With a factory made woven wire fence it is **impossible** to get a perfect fit of the hilly country and the fence will buckle.

HOG FENCE

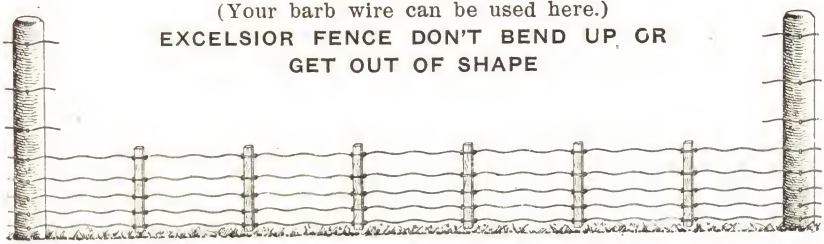
The Best for Hogs: EXCELSIOR FENCE, having a STIFF STRONG STAY which does not bend up, makes it absolutely the best fence for hogs. EXCELSIOR FENCE **stays up** and does not get out of shape. There are now in use hundreds of miles of woven wire fence made for turning hogs which is down and out, bent up so badly that it is entirely unfit for the purpose intended. You undoubtedly have seen lots of it. HERE IS THE CAUSE: **A wire stay won't stand an end pressure.** It will bend up easily and STAY BENT, putting the fence out of shape and making it almost worthless. EXCELSIOR Hog Fence is constructed on the common sense principle—it **cannot** bend up—**cannot** lose its shape. Our Clamps and Stays make it impossible to spread the wires.

Excelsior Stays and Clamps are used on ALL wire fences, which is proof of their advantage and superiority. You can utilize your barb wire at the top of the hog fencing or use it anywhere where the smooth wire is used, fastening ALL wires with our Clamps and Stays. In adding wires at the top of our 2 ft. hog fence, our 4 ft. stays can be used and run from the bottom of the fence to the top, thus holding ALL the wires together in a complete fabric. This plan is illustrated in our combination Hog and Stock fences.

2 Ft. Stays: All stays are 4 ft. long, in bundles of 25. A whole bundle can be very easily and quickly sawed at a time, thus making 50 2 ft. lengths.

Large Enclosures: Styles No. 14, 15, 16 and 17, having 5 wires, are generally used to enclose a large field or enclosure where the stock have plenty of room.

(Your barb wire can be used here.)
EXCELSIOR FENCE DON'T BEND UP OR
GET OUT OF SHAPE

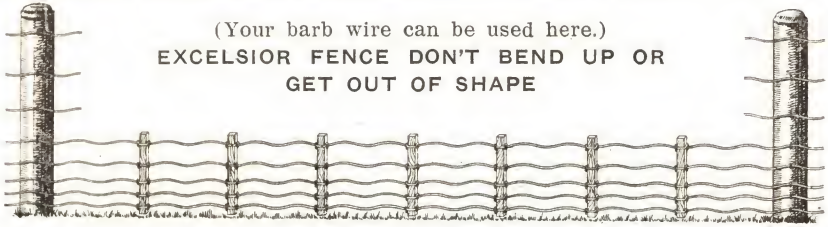


HOG
FENCE

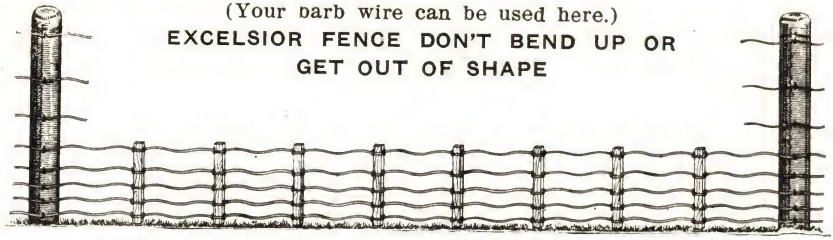
No. 14—2 ft. high; 5 wires, spaced 4, 4¾, 5¼ and 6½ inches apart; 6 stays to the rod.

HOG
FENCE

(Your barb wire can be used here.)
EXCELSIOR FENCE DON'T BEND UP OR
GET OUT OF SHAPE



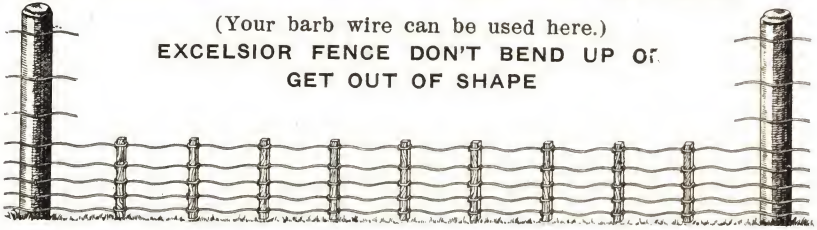
No. 15—2 ft. high: 5 wires, spaced 4, 4¾, 5¼ and 6½ inches apart; 7 stays to the rod.



HOG
FENCE

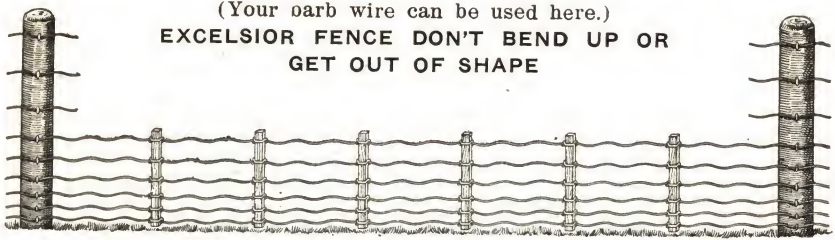
No. 16—2 ft. high; 5 wires, spaced 4, 4¾, 5¼ and 6½ inches apart; 8 stays to the rod.

HOG
FENCE

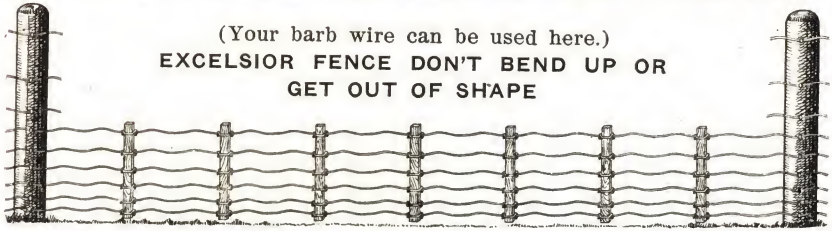


No. 17—2 ft. high; 5 wires, spaced 4, 4¾, 5¼ and 6½ inches apart; 9 stays to the rod.

HOG FENCE.



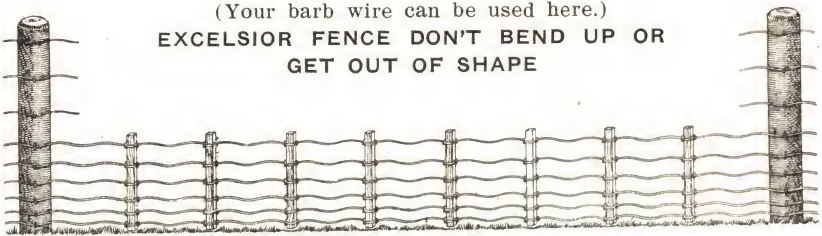
No. 18—2 ft. high; 6 wires, spaced 3, 3½, 4, 4½, 5, 5½, 7½ and 11 inches apart; 6 stays to the rod.



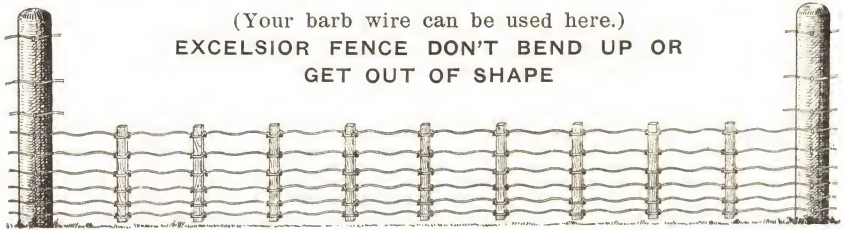
HOG FENCE.

No. 19—2 ft. high; 6 wires, spaced 3. 3½. 4, 4½, 5, 5½, 7½ and 11 inches apart; 7 stays to the rod.

HOG
FENCE.



No. 20—2 ft. high; 6 wires, spaced 3, 3½, 4, 4½, 5, 5½, 7½ and 11 inches apart; 8 stays to the rod.



HOG
FENCE.

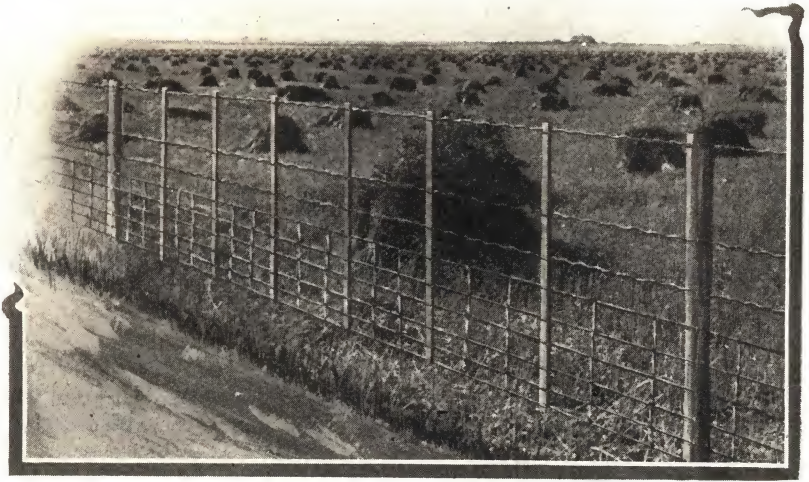
No. 21—2 ft. high: 6 wires, spaced 3, 3½, 4, 4½, 5, 5½, 7½ and 11 inches apart; 9 stays to the rod.

Coiled Spring Wire: We use only the best High Carbon Coiled Steel Spring Wire in Excelsior Fence. Our fencing can be constructed with the ordinary straight common wire, but we do not recommend it as coiled steel spring wire is so much better. Every wire in Excelsior Fence is a spring running from end to end of the fence, making every foot of it self-regulating under any change in temperature and providing perfectly against sagging. In breaking strain, one pound of our coiled steel spring wire is nearly equal to two strands of the same size plain wire. Straight wire has no provision for contraction and expansion. It therefore gets very loose and saggy in warm weather, while in cold weather it contracts, sometimes causing it to break. Anyone who has used coiled steel spring wire would not use any other kind of wire. See pages 28, 29 and 36.

Elasticity: Should any animal run against Excelsior Fence, it would not leave a sagged place, but the fence would immediately spring back into place again and would not be affected in the least. Heavy trees have fallen upon Excelsior Fence, but the wire did not break owing to its spring or elasticity.

A Wrong Impression: Because a ready-made woven wire fence comes in rolls "ready to tack to the posts" anyone is apt to get the impression that it is easier to put up. But this is not so. It is much more difficult to stretch a woven wire fence and in most cases very expensive and unwieldy stretchers are required. A half mile or more of Excelsior Fence can be stretched at one time and with one bracing in comparison with three or four stretches to be made with the woven fence. Excelsior Fence, being constructed on the ground, makes a perfect fit and all the wires are taking their proportionate share of the strain. It is more difficult to stretch the woven fence, especially over hilly country, as it will buckle or sag in some places, thus throwing all the strain upon a few wires, which must give way in time, as the factory-made fence is necessarily woven with small soft wire.

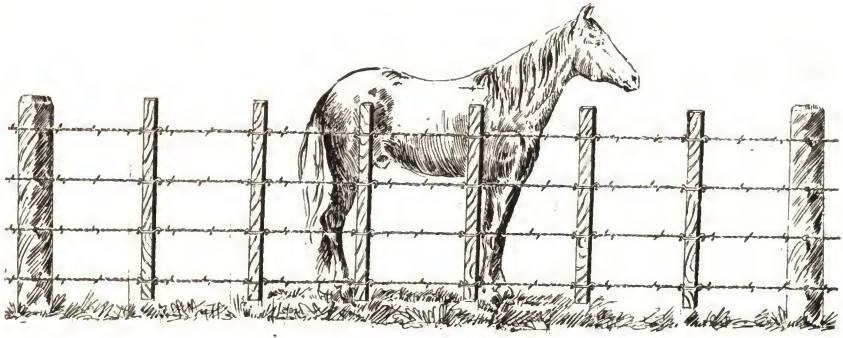
A photograph of a woven wire fence BEFORE Excelsior Stays and Clamps were applied.



Another photograph of the same fence AFTER Excelsior Stays and Clamps were applied.

It is only too often true. Is it economy to buy barb wire?

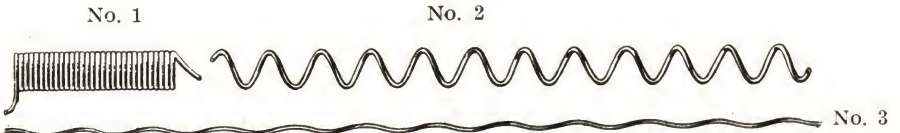
There are many users of barbed wire fence to whom the above illustration is no exaggeration. The loss in stock caused by the use of barbed wire has been estimated at more than the cost of a good fence.



Excelsior Stays and Clamps make it less dangerous.

Nothing is visible of a barbed wire fence except the posts, even at a very close range, and a horse will run into the barbed wire before he is aware of any obstruction. When barbed wire sags it is far more destructive than when it is tight. With Excelsior Stays and Clamps the fence is made visible with very little additional cost and the wires are kept from sagging.

Excelsior Stays and Clamps will repair a barbed wire fence, and make a good fence out of it cheaper and better than any other method. A trial will convince anyone.

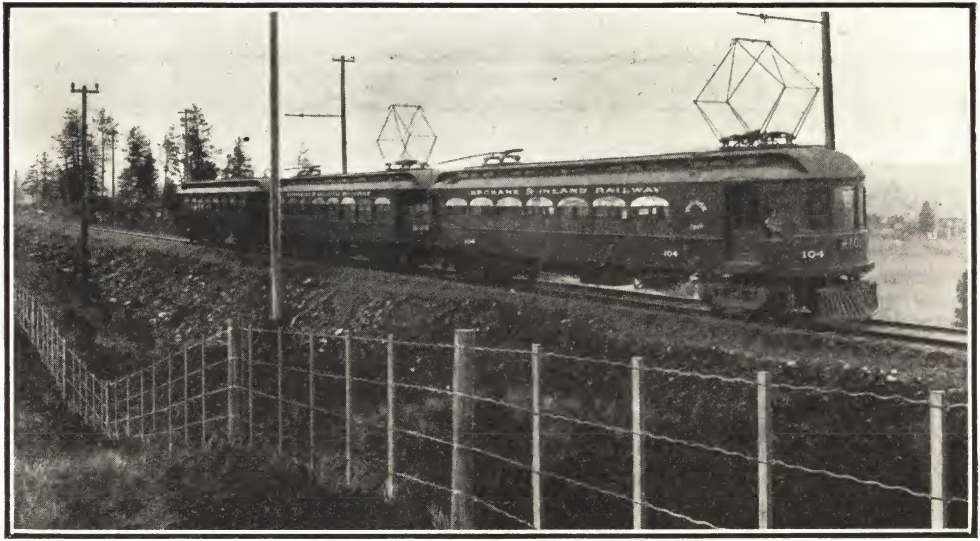


The Coil Will Not Pull Out: There are some who are of the opinion that the coil or spiral wave will pull out of coiled steel spring wire. Here is where they can experiment and prove to their own satisfaction that the coil will not pull out. It may not be convenient to secure a piece of straight or uncoiled steel spring wire, but even take a piece of common 14 or 15 gauge wire, wrap it around a ¼ or ⅜ inch round iron bar or stick of that size with the coils close together so as to form a spring shape as per illustration No. 1. Fasten one end in a vise, or something that will hold it tight, and pull on the other end with a pair of pliers. It will at once assume the form of illustration No. 2. By pulling out as hard as you can, it will appear that you have pulled nearly all the coil out, but on releasing the strain, the wire will assume the form of illustration No. 3, which is the form of our coiled steel spring wire. By sighting along the wire as you would look through the barrel of a gun, it will be seen that there is plenty of spiral wave or coil still in the wire. This is the nature of coiled spring wire. It is self-regulating—gives and takes as changes in temperature demand, thus providing perfectly against sagging or becoming loose.

This is the severest test the coil could possibly be put to, but even with common soft wire of such a small size the coil won't pull out. This being the case with soft wire of such small size, try to realize how much more Strength, Resisting Power and Elasticity EXCELSIOR HARD HIGH CARBON COILED STEEL SPRING WIRE has. See page 23.

Coil Much Better Than Kink: The coil is not merely a wave, but it is a **spiral wave** after the nature of a corkscrew. By sighting along our coiled spring wire you can notice a tube or hollow through it. The kink is **only an offset** in the wire, and some manufacturers or dealers, in order to sell their fence, will try to delude you into thinking that the kink answers the same purpose the coil does. This is absurd. Notice the above illustrations of the coil and kink. Anyone can see at a glance that the kink **cannot** have the **strength, resisting power** or **elasticity** of our coiled spring wire. The quickest way to break a wire is to kink it as it disarranges and weakens the fibre of the wire. The action of contraction and expansion, due to changes of temperature, will further weaken the kink. In the coil, the fibre of the wire is not in the least affected. The superiority and great advantage of Excelsior Coiled Spring Wire is so evident and plainly seen that no further explanation is necessary.

You will never fully appreciate the advantages or the real satisfaction to be gained by using EXCELSIOR FENCE or EXCELSIOR STAYS and CLAMPS until you have tried them.



Notice how evenly Excelsior Fence stretches up and down hills. Excelsior Fence used entirely by the Spokane & Inland Empire Railway.

INLAND EMPIRE SYSTEM

ENGINEERING DEPARTMENT

INLAND EMPIRE SYSTEM

SPOKANE & INLAND EMPIRE RAILROAD COMPANY

Excelsior Fence Works,
Spokane, Wash.

SPOKANE, WASH., Feb. 27, 1907

Gentlemen:-

Answering your recent inquiry, I am pleased to state that your fencing which this Company is using exclusively, is admirably adapted for railroad fencing, and I hear many expressions in praise of the fence from those having farms along the right of way.

Heavy trolley poles have occasionally fallen upon the fence, but it readily sprang back into place again as soon as the poles were removed.

Yours truly,

Alex. M. Lyster

Chief Engineer.

"Bull Strong and Hog Tight"

A scene on the Hazelwood Farm, R. F. D. No. 1, Spokane, Wash. See letter on opposite page.

Hazelwood Natsey Jewel
Champion at Lewis & Clark Fair
Portland

Address All Mail to Hazelwood Farm, R. F. D. 1, Spokane.

HAZELWOOD FARM

JOHN L. SMITH, Manager.

Breeders of High Class Holstein Cattle, Poland China Hogs, White Rock Chickens.

Excelsior Fence Works, Spokane, Wash. Jan 2nd 190

Spokane, Wash.

Gentlemen,—

I have just been out looking at the fence you put up for us and must say it is the best hog and stock fence I have ever seen. Farmers should adopt your fence all over the country.

Yours Respectfully,

Hazelwood Farm,

John L. Smith, Mgr.

A scene on J. P. Graves' "Waikiki" Stock Farm, six miles north of Spokane, showing the Excelsior horse and cattle fence which may be made hog-tight at any time by the addition of a few more wires and clamps at bottom. See letter on opposite page.

Waikiki Stock Farm

J. P. GRAVES, *Proprietor*

RANCH LOCATED SIX MILES
NORTH OF SPOKANE

Spokane, Wash. Feb. 4, 1907.

Dear Sirs:-

You will please find inclosed with this letter an order for material for the construction of one and one-half mile of your Excelsior fence. I think this will replace and complete the fencing on our Waikiki Farm which is something over 675 acres.

We finally discovered that your Excelsior Fence is by far the most satisfactory fence, being cheap in construction and maintenance. We find it to be built strong, hog tight and deer high.

Say, by the way, the twelve foot fence you built for us inclosing our deer park is a marvel. It has the neatest appearance for a fence of its heighth, of anything we could have built, and we are very much pleased with all of your fence.

Yours truly,

A O Mead Supt of Ranch

Table of Sections, Acres, Miles and Rods

1	section...	640 acres...	4	miles...	1280 rods
½	section...	320 acres...	3	miles...	960 rods
¼	section...	160 acres...	2	miles...	640 rods
		80 acres...	1½	miles...	480 rods
		40 acres...	1	mile....	320 rods
		20 acres...	¾	mile....	240 rods
		10 acres...	½	mile....	160 rods
		5 acres.....			113 rods
		1 acre.....			52 rods

Table giving the actual tested breaking strain of Coiled Steel Spring Wire as compared with the same size common wire:

Coiled Steel Spring Wire

No. 9.....1925 lbs.
No. 10.....1720 lbs.
No. 11.....1305 lbs.

Common Soft Galvanized Wire

No. 9.....1275 lbs.
No. 10..... 970 lbs.
No. 11..... 775 lbs.

Breaking strain of barb wire 500 to 1250 lbs., according to size and quality; 1250 lbs. is the breaking strain of the best barb wire made of two strands of No. 12 gauge wire.

Running Distance

Coiled Steel Spring Wire

No. 9.....17 ft. per lb.
No. 10.....20½ ft. per lb.
No. 11.....26 ft. per lb.

Common Soft Galvanized Wire

No. 9.....17.34 ft. per lb.
No. 10.....20.07 ft. per lb.
No. 11.....26.18 ft. per lb.

The running distance of the average barb wire is one rod (16½ ft.) to the lb.

IMPORTANT—With reference to breaking strain, the reader will notice we have given the ACTUAL TESTED breaking strain. Some manufacturers, in order to create an argument to sell their product, inflate the breaking strain. Coiled Steel Spring Wire has nearly double the tensile strength or breaking strain of the same size ordinary wire and we are satisfied to give the honest figures as they are such as to justify anyone in using coiled steel spring wire in preference to the common soft wire. Don't be misled into believing that some manufacturer's wire is stronger than our Excelsior Coiled Steel Spring Wire just because they say so in their figures. We use nothing but the very best coiled steel spring wire. There is none better.

The following table gives the amount of materials and the total weight of the combined materials, including wire, stays, clamps and staples, to construct 100 rods of every style of fence illustrated in this catalog. The customer is given the choice of three sizes of wire—No. 9 being the largest, No. 10 being one size smaller than No. 9, and No. 11 being one size smaller than No. 10. No. 11 wire is not used for styles 1 and 2.

Style No.	Wire			Stays 4 ft.	Clamps	Staples	Weight per 100 rods in lbs.		
	No. 9	No. 10	No. 11				No. 9	No. 10	No. 11
1	400 lbs.	326 lbs.	Not used	600	2400	8 lbs.	1356 lbs.	1282 lbs.	Not used
2	500 lbs.	408 lbs.	Not used	600	3000	10 lbs.	1470 lbs.	1378 lbs.	Not used
3	700 lbs.	571 lbs.	451 lbs.	500	4100	12 lbs.	1544 lbs.	1415 lbs.	1295 lbs.
4	800 lbs.	652 lbs.	516 lbs.	600	4800	14 lbs.	1810 lbs.	1662 lbs.	1526 lbs.
5	900 lbs.	733 lbs.	580 lbs.	500	5100	16 lbs.	1768 lbs.	1601 lbs.	1448 lbs.
6	900 lbs.	733 lbs.	580 lbs.	600	5400	16 lbs.	1924 lbs.	1757 lbs.	1604 lbs.
7	900 lbs.	733 lbs.	580 lbs.	650	6600	16 lbs.	2023 lbs.	1856 lbs.	1703 lbs.
8	1000 lbs.	815 lbs.	645 lbs.	500	5800	18 lbs.	1884 lbs.	1699 lbs.	1529 lbs.
9	1000 lbs.	815 lbs.	645 lbs.	600	6000	18 lbs.	2038 lbs.	1853 lbs.	1683 lbs.
10	1000 lbs.	815 lbs.	645 lbs.	650	7500	18 lbs.	2143 lbs.	1958 lbs.	1788 lbs.
11	1100 lbs.	896 lbs.	709 lbs.	500	6500	20 lbs.	2000 lbs.	1796 lbs.	1609 lbs.
12	1100 lbs.	896 lbs.	709 lbs.	600	6600	20 lbs.	2152 lbs.	1948 lbs.	1761 lbs.
13	1100 lbs.	896 lbs.	709 lbs.	650	8400	20 lbs.	2263 lbs.	2059 lbs.	1872 lbs.
14	500 lbs.	408 lbs.	323 lbs.	300	3000	10 lbs.	1020 lbs.	928 lbs.	843 lbs.
15	500 lbs.	408 lbs.	323 lbs.	350	3500	10 lbs.	1105 lbs.	1013 lbs.	928 lbs.
16	500 lbs.	408 lbs.	323 lbs.	400	4000	10 lbs.	1190 lbs.	1098 lbs.	1013 lbs.
17	500 lbs.	408 lbs.	323 lbs.	450	4500	10 lbs.	1275 lbs.	1183 lbs.	1098 lbs.
18	600 lbs.	489 lbs.	387 lbs.	300	3600	12 lbs.	1134 lbs.	1023 lbs.	921 lbs.
19	600 lbs.	489 lbs.	387 lbs.	350	4200	12 lbs.	1221 lbs.	1110 lbs.	1008 lbs.
20	600 lbs.	489 lbs.	387 lbs.	400	4800	12 lbs.	1308 lbs.	1197 lbs.	1095 lbs.
21	600 lbs.	489 lbs.	387 lbs.	450	5400	12 lbs.	1395 lbs.	1284 lbs.	1182 lbs.

Line Posts: Each illustration of fence in this catalog represents one rod (16½ ft.) and the posts are set one rod apart. In erecting Excelsior Fence, the posts may be set as far apart as with any other fence, and farther, as each Excelsior Stay is a false post holding the wires from spreading, but for ordinary purposes we do not recommend setting the line posts further apart than 20 feet.

Erecting Fence: Don't be afraid about putting up Excelsior Fence. It is the easiest and quickest fence to put up. We furnish complete instructions which are easily read and understood. No previous experience is necessary.

SAVE THE COST OF WEAVING

Why pay the factory cost of weaving fence when you can construct Excelsior Fence to much better advantage? We give you the necessary amount of material, which is very easily and quickly put together in the field; YOU save the cost of weaving at the factory, and get the benefit in heavier, more lasty and better materials, which make a much better fence. A trial will prove it.

In constructing your own fence, you not only save the cost of weaving and get more substantial and better materials to start with, but the fence can be constructed to better advantage on the ground. Each wire being stretched separately, the fence is made to fit the land perfectly, no matter how hilly.

When railroads adopt a certain kind of fence and expend thousands of dollars in fencing, you can depend upon it they exercise the most careful investigation as to the merits of the fence, and its price. And that is just why EXCELSIOR FENCE is being adopted by the railroads—because it shows up the best. We have ALWAYS secured the business on EVERY railroad contract we have figured on. The following railroads use EXCELSIOR FENCE entirely:

INLAND EMPIRE SYSTEM—Coeur d'Alene & Spokane Railway, Spokane & Inland Empire Railway.

WASHINGTON WATER POWER CO.—Medical Lake & Cheney Suburban Line.

IDAHO & WASHINGTON NORTHERN RAILWAY.

SPOKANE INTERNATIONAL RAILWAY.

PRICE LIST

Subject to Change Without Notice

For Use in Connection With Catalog No. 5

Excelsior High Carbon Coiled Steel Spring Galvanized Wire:

No. 9 gauge.....$4.55 per 100 lbs.
No. 10 gauge..... 4.60 per 100 lbs.
No. 11 gauge..... 4.65 per 100 lbs.
} **In coils averaging about 150 lbs. each**

Excelsior 4 ft. Fence Stays, $15.00 per 1000. (Made of Clear Coast Fir.)
Excelsior Fence Clamps, $2.50 per 1000.
1¾ inch Fence Staples in 100 lb. lots, $4.50; in less than 100 lb. lots, 5c per lb.
Brace Wire, No. 9 galvanized, in less than full coils 5c per lb. **Figure 3 lbs. to a brace.**
Ratchets (wire tighteners), 2 for 25c.
Block Tackle Wire Stretchers with bulldog wire grip, $1.65.
Staple Plier and Wire Cutters (one tool), $1.00.
Wire Splicer, 25c.
Excelsior Fence Clamper (fence building tool), $2.50.
Wire Reel, $3.00.
Excelsior Gates:

4 ft.	**$ 4.50**
10 ft.	7.50
12 ft.	9.00
14 ft.	10.50
16 ft.	12.00

Excelsior Automatic Gate Opening Attachment, $15.00.

COST OF MATERIAL INCLUDING WIRE, STAYS, CLAMPS AND STAPLES

To construct 100 rods of the different styles of fence illustrated in Catalog No. 5. Each illustration of fence represents one rod (16½ft.):

		PRICE PER 100 RODS		
		With No. 9 Wire	With No. 10 Wire	With No. 11 Wire
HORSE AND CATTLE FENCE	Style No. 1, page 10	$33.60	$30.40	Not used
	Style No. 2, page 10	39.75	35.77	Not used
GENERAL STOCK FENCE	Style No. 3, page 11	50.20	44.62	39.32
	Style No. 4 page 12	58.10	51.69	45.69
	Style No. 5 page 12	62.00	54.77	48.02
	Style No. 6, page 13	64.25	57.02	50.27
	Style No. 7, page 13	68.00	60.77	54.02
	Style No. 8, page 14	68.40	60.39	52.89
	Style No. 9, page 14	70.40	62.39	54.89
	Style No. 10, page 15	74.90	66.89	59.39
	Style No. 11, page 15	74.80	65.97	57.72
	Style No. 12, page 16	76.55	67.72	59.47
	Style No. 13, page 16	81.80	72.97	64.72
HOG FENCE	Style No. 14, page 19	35.25	31.27	27.52
	Style No. 15, page 19	37.25	33.27	29.52
	Style No. 16, page 20	39.25	35.27	31.52
	Style No. 17, page 20	41.25	37.27	33.52
	Style No. 18, page 21	41.40	36.59	32.10
	Style No. 19, page 21	43.65	38.84	34.35
	Style No. 20, page 22	45.90	41.09	36.60
	Style No. 21, page 22	48.15	43.34	38.85

ERROR: On page 10 in catalog, Style No. 1 is placed where Style No. 2 should be, and Style No. 2 is placed where Style No. 1 should be. Style No. 1 should be the 4 wire fence and Style No. 2 the 5 wire fence.

We pay the Freight

EXCELSIOR FENCE WORKS
Spokane, Wash.

See other side

WE PAY THE FREIGHT

WE PAY THE FREIGHT on 50 rods or more of any style of fence illustrated in our catalog to any station within 140 miles of Spokane.

This means that our prices include **FREIGHT PAID** on 50 rods or more as far as the following stations, and to any stations between them and Spokane.

On the **NORTHERN PACIFIC RAILWAY**, as fas ar Pasco, Wash., all stations on the Washington Central branch line, all stations as far as Lenore, Idaho, on the Palouse branch line and all stations east as far as Mullan, Idaho, and Thompson, Montana.

On the **GREAT NORTHERN RAILWAY**, as far as Cashmere, Wash., on the west; Kootenai Falls, Montana, on the east, and Marcus, Wash., on the north (S. F. & N. Ry.).

On the **OREGON RAILWAY & NAVIGATION CO.**, as far as Connell and Riparia, Wash., Lewiston and Burke, Idaho.

To all stations on the Inland Empire System, Washington Water Power Co. and Spokane International Ry.

FOR $25 WORTH of any of our goods (except Stays) **WE PAY THE FREIGHT** to any station within 180 miles of Spokane. Price of Stays laid down to your station may be had on application.

TO POINTS FURTHER AWAY we will quote proportionate low prices which can be had on application.

TERMS AND INSTRUCTIONS

Terms are cash with order for amounts of Ten Dollars ($10) or less. If the order amounts to more than $10, you may either send the full amount with the order, or send half of it, the balance to be paid on delivery.

CREDIT AND STANDING

Please understand that this is no reflection on your credit or standing. Most of our customers are perfectly good, but we have no way of knowing it and it would take too much time, trouble and delay to find out. We are perfectly reliable and responsible and you take no risk. By paying cash you get the best prices.

REMITTANCES

Make all remittances by Bank Draft, Express or Post Office Money Order or Registered Letter.

REFERENCES

To Whom It May Concern:

We are pleased to recommend to the public the Excelsior Fence Co. (Simmons & Sons) as being thoroughly reliable and in good financial standing.

EDWIN T. COMAN, Vice President,
Exchange National Bank, Spokane, Wash.

(For further references write to Spokane Chamber of Commerce or any business house in Spokane.)

REMEMBER, WE PAY THE FREIGHT

Excelsior Fence Company

SPOKANE, WASH.

See other side

Photographed BEFORE Excelsior Stays and Clamps Were Used.

A fence like this one is the cause of endless time and trouble and much damage from loss than can never be estimated.

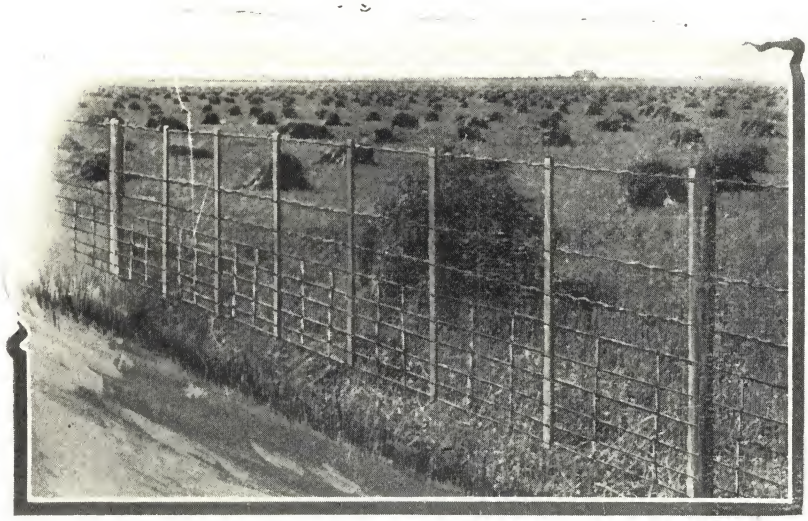
A LETTER from a man who had a fence like the above.

EXCELSIOR FENCE WORKS, Spokane, Wash.

Gentlemen: We are in possession of one of your catalogs describing Excelsior Fencing. We have a farm of about 1000 acres near Moscow, Idaho, and have it well stocked. We have about five miles of 26 woven wire fence on the farm with one barb at the bottom and two barb wires at the top. We are experiencing some trouble with the wire sagging and the stock pushing through and have been thinking it might be well for us to try your plan of making fence in repairing this fence and putting it in good shape.

Please ship us 1,000 Excelsior Fence Stays, 7,000 Excelsior Fence Clamps and one Excelsior Fence Clamper. We will try this and, if satisfactory, you will hear further from us. Yours truly,

B. T. BYRNES & CO., Moscow, Idaho.



Photographed AFTER Excelsior Stays and Clamps Were Put On.

MADE HOG PROOF AND BULL PROOF with EXCELSIOR STAYS AND CLAMPS

EXCELSIOR FENCE WORKS, Spokane, Wash.

Gentlemen: We have used the Excelsior Fence material furnished by you some time since and are well satisfied with the same. We will order 5,000 additional stays and will want more clamps from you. A good many farmers have seen the fence, and I am of the opinion you will receive orders in the near future for additional supplies. Yours truly,

B. T. BYRNS & CO., Moscow, Idaho.

FROM OUR MAIL

EXCELSIOR FENCE WORKS, Spokane, Wash.

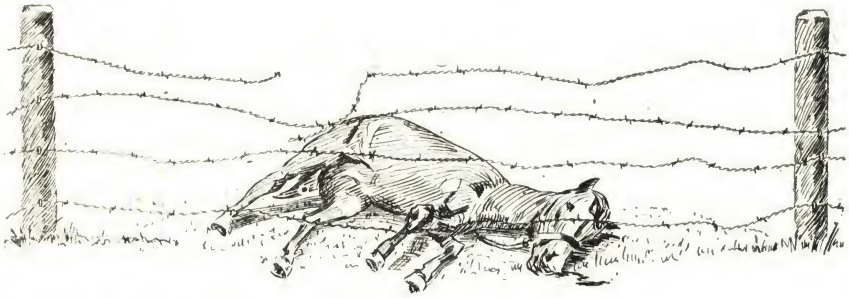
Gentlemen: I have tried your Clamps and Stays both in making new fence and in repairing other fences of different make, and am well pleased with the results. I have over fifty miles of fence on my different ranches, have tried a great many kinds, and I say without any hesitation that your Excelsior Clamps make the best fastenings for ANY kind of wire fence I have ever seen. Very truly yours, (Signed) R. A. JACKSON,

Proprietor Tucannon Stock Ranch, Dayton, Wash.

WRITE FOR CATALOG AND PARTICULARS.

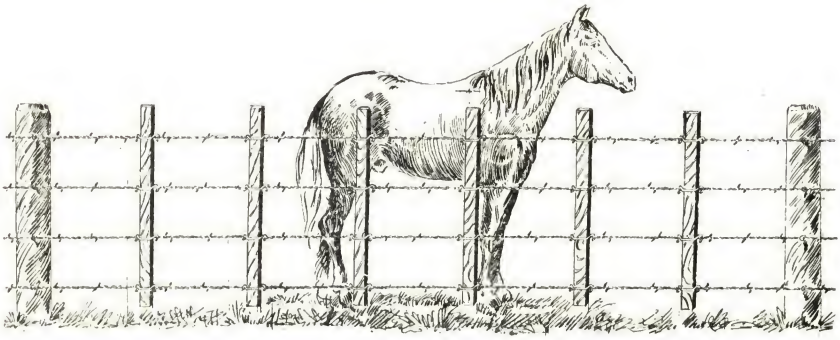
EXCELSIOR FENCE WORKS

SPOKANE, WASH.



"A COLD PLAIN FACT." Happens every day. Does it **pay you** to use such fences? Does such a fence look good anyhow? It's a money looser from any standpoint,

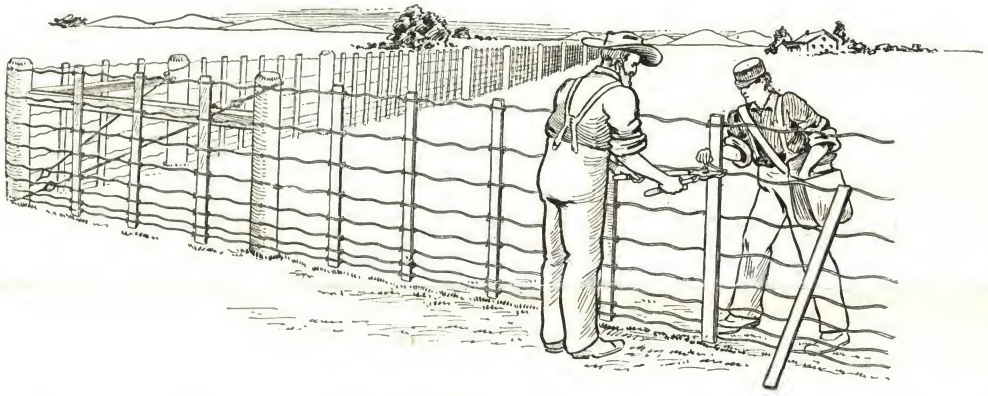
You may lose more than what a good Fence will cost **tomorrow. Can you afford to run the risk?**



EXCELSIOR STAYS AND CLAMPS REMOVE THE DANGER.

Nothing is visible of a barb wire fence except the posts, even at a very close range, and a horse will run into the barb wire before he is aware of any obstruction. When barb wire sags it is far more destructive than when it is tight. With **EXCELSIOR STAYS** and **CLAMPS** the fence is made **visible** with very **little additional cost** and the **wires** are kept from **sagging.**

EXCELSIOR STAYS and CLAMPS will repair a barb wire fence, and make a good fence out of it **cheaper** and **better** than any other method. A trial will convince anyone.



Fence building is made simple, easy and quick You save the factory cost of weaving and get a perfect fit as the fence is built on the ground. Easily stretched over hilly country.

Let us send you trial outfit FREE without cost or risk to you. Write for it today, **now.**

EXCELSIOR FENCE WORKS

SPOKANE, WASH.

(Over)

Coeur d'Alene & Spokane Railway Company, Limited.

Office of the General Manager.

R. F. BLACKWELL,
General Manager.

Coeur d'Alene, Idaho, Feb. 24, 1905.

Excelsior Fence Works.

Gentlemen: Answering your letter of the 22nd: We have between eight and nine miles of our track fenced with the Excelsior Fence. On two occasions wood choppers have felled trees onto the fence and it did not break the wire either time. This was due to the spiral or twist of wire which we consider a great feature.

Should we have any more fencing to do, shall undoubtedly use your make. Yours truly,

(Signed) COEUR D'ALENE & SPOKANE RAILWAY CO., LTD.,
By R. F. BLACKWELL, General Manager.

Coeur d'Alene & Spokane Railway Company, Limited.

Office of the General Manager.

R. F. BLACKWELL,
General Manager.

Coeur d'Alene, Idaho, April 30, 1906.

Excelsior Fence Works,
Walnut and N. P. Ry., Spokane, Wash.

Gentlemen: In reply to your letter of the 27th, we herewith inclose you requisition for 16 miles of fencing and material. Yours truly,

(Signed) COEUR D'ALENE & SPOKANE RAILWAY CO., LTD.,
By R. F. BLACKWELL, General Manager.

Coeur d'Alene & Spokane Railway Company, Limited.

Office of the General Manager.

R. F. BLACKWELL,
General Manager.

Coeur d'Alene, Idaho, Feb. 24, 1905.

Excelsior Fence Works.

Gentlemen: Answering your letter of the 22nd: We have between eight and nine miles of our track fenced with the Excelsior Fence. On two occasions wood choppers have felled trees onto the fence and it did not break the wire either time. This was due to the spiral or twist of wire which we consider a great feature.

Should we have any more fencing to do, shall undoubtedly use your make. Yours truly,

(Signed) COEUR D'ALENE & SPOKANE RAILWAY CO., LTD.,
By R. F. BLACKWELL, General Manager.

Coeur d'Alene & Spokane Railway Company, Limited.

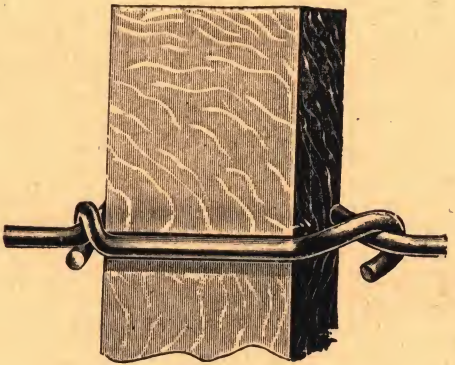
Office of the General Manager.

R. F. BLACKWELL,
General Manager.

Coeur d'Alene, Idaho, April 30, 1906.

Quickly and
Easily Applied.

Always
Tight



Cannot Slip

Unequaled for Making
and Repairing Fence

EXCELSIOR FENCE CLAMP.

The Mercantile Press
171 S. Post St., Spokane